

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2018/2019

BJA1034 – Java Programming Fundamentals
(All sections / Groups)

19 OCT 2018
9.00 a.m – 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of 3 pages (including cover page) with 4 questions only.
2. Attempt ALL FOUR questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Please write all your answer in the Answer Booklet provided.

Question 1 (25 Marks)

It is difficult to make a budget that spans several years, because prices are not stable. If your company needs 200 pencils per year, you cannot simply use this year's price as the cost of pencils two years from now. Because of inflation, the cost is likely to be higher than it is today. Write a program to gauge the expected cost of an item in a specified number of years. The program asks for the cost of the item, the number of years from now that the item will be purchased, and the rate of inflation. The program then outputs the estimated cost of the item after the specified period. Have the user enter the inflation rate as a percentage, such as 5.6 %. Your program should then convert the percent to a fraction, such as 0.056 and should use a loop to estimate the price adjusted for inflation.

- i. Draw the flowchart of the program. (9 Marks)
- ii. Write the Java program. (16 Marks)

Question 2 (25 Marks)

MMU Management team allow students' club and society to host an event. The entrance price of the event is RM35.00 per person. If the participants of the event are more than 50 people, then the event consider as a large event. You as the programmer are asked to write a program that prompt user for the event type number and number of guest. The program must have contained a class named *Event*. The class should have instance variables to store the event type number, number of participants, total entrance price. You should add a constructor that allows the user of the class to set all instance variable, and another method that outputs all the instance variables. The program should output the type of the event, total entrance price for all participants and whether the event is a large event. Following is a list of number with respectively type of event.

Type number	Event
1	Study gathering
2	Board game gathering
3	Social gathering
4	Luxury dinner
5	Celebration

(25 Marks)

Continued...

Question 3 (25 Marks)

Your company is open for job application. You as a programmer need to prompt the job applicant to key in their details (name and phone number) and qualification (word, spreadsheet, graphics, and database) using dialog boxes. Inputs for details as string while qualification is Boolean. The program will then declare a JobApplicant class. A minimum of 3 skills is required for the job applicant qualified for an interview. The program will then process the qualification of the applicants and display the details and whether he/she qualified for interview at this time. (25 Marks)

Question 4 (25 Marks)

Write a program that allows the user to enter the top 5 expenses type of his/her company and the expenses amount for each type. The program should then output each expenses type, the expenses amount, and the percentage of the total expenses of these top 5 expenses. Your program should also output the highest expenses type. A sample output is:

Expenses	Amount	(RM)	% of Total Expenses
food		2500.0	16.89
utility		1300.0	8.78
salary		8000.0	54.05
production cost		2500.0	16.89
transportation cost		500.0	3.38
Total		14800.0	

The top expenses type is salary.

(NOTE: Array MUST be used in this question)

(25 Marks)